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PIPE JOINT

FIELD OF THE INVENTION

[0001] The present invention relates to a pipe joint for connecting piping used for fluid circulation.

BACKGROUND OF THE INVENTION

[0002] In a fluid circulation system as shown in Fig. 5, in order to minimize transmission of vibration generated in a power unit 50, such as a pump and a motor, to a piping system 51 as much as possible, the power unit 50 and the piping system 51 are connected via a pipe joint 52 having excellent vibration insulation properties. As the pipe joint 52, those such as the one shown in Fig. 6 are employed. This pipe joint 52 comprises a joint body 53 made of an elastic material, such as rubber, and a reinforcement member 54 made of a synthetic fiber or the like and embedded into the radial thickness of the joint body 53. Further, onto both openings 55,55 of the joint body 53 are attached metallic flanges for connection 56,56.

[0003] The pipe joint 52 as described above according to the conventional technology, however, inevitably needs to embed the reinforcement member 54 into the joint body 53 in order to keep the shape of the joint body 53, and moreover, as fluid pressure is exerted on the joint body 53, the joint body 53 expands and spreads axially, which stresses the piping system 51 by putting an unfavorable load thereon. In addition, when both flanges 56 are attached to the joint body 53, it is necessary to crush both ends of the joint body for fitting the flanges thereinto, which makes the work complicated.